

- C2
cont.
17. (New) A diagnostic test kit according to claim 15, wherein the means comprises the necessary elements for Southern blotting.
 18. (New) A diagnostic test kit according to claim 16, wherein the probe comprises a sequence complementary to sequences on both sides of the deletion in the BRCA1 gene.
 19. (New) A diagnostic test kit according to claim 17, wherein the necessary elements for Southern blotting comprises a probe, the probe comprising a sequence complementary to sequences on both sides of the deletion in the BRCA1 gene.
 20. (New) A diagnostic test kit according to claim 15, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
 21. (New) A diagnostic test kit according to claim 16, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
 22. (New) A diagnostic test kit according to claim 17, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
 23. (New) A diagnostic test kit according to claim 18, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
 24. (New) A diagnostic test kit according to claim 19, wherein the deletion comprises all of one or more of exons 13, 14, 15, 16 or 22 of the BRCA1 gene.
 25. (New) A diagnostic test kit according to claim 15, wherein the deletion comprises a frame shift and/or a termination codon.
 26. (New) A diagnostic test kit according to claim 16, wherein the deletion comprises a frame shift and/or a termination codon.

- C2
cont.
27. (New) A diagnostic test kit according to claim 17, wherein the deletion comprises a frame shift and/or a termination codon.
 28. (New) A diagnostic test kit according to claim 18, wherein the deletion comprises a frame shift and/or a termination codon.
 29. (New) A diagnostic test kit according to claim 19, wherein the deletion comprises a frame shift and/or a termination codon.
 30. (New) A diagnostic test kit according to claim 20, wherein the deletion comprises a frame shift and/or a termination codon.
 31. (New) A diagnostic test kit according to claim 15, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
 32. (New) A diagnostic test kit according to claim 16, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
 33. (New) A diagnostic test kit according to claim 17, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
 34. (New) A diagnostic test kit according to claim 18, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
 35. (New) A diagnostic test kit according to claim 19, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
 36. (New) A diagnostic test kit according to claim 20, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.
 37. (New) A diagnostic test kit according to claim 25, wherein the deletion comprises a deletion of a stretch of nucleotides between two ALU-elements.

- C2
cont.
38. (New) A probe for use in a diagnostic test kit for detecting the presence of or predisposition for breast cancer, wherein a means is provided for detecting a deletion of a stretch of nucleotides from a BRCA1 gene in a sample, and wherein the deletion comprises at least a major part of any one or all of exons 13, 14, 15, and 16, or at least a major part of exon 22; said probe comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
39. (New) A probe for use in a diagnostic test kit according to claim 38, wherein the means comprises at least one probe for hybridization, the probe comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
40. (New) A probe for use in a diagnostic test kit according to claim 38, wherein the means comprises the necessary elements for Southern blotting, comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
41. (New) A probe for use in a diagnostic test kit according to claim 18, comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
42. (New) A probe for use in a diagnostic test kit according to claim 19 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
43. (New) A probe for use in a diagnostic test kit according to claim 20 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
44. (New) A probe for use in a diagnostic test kit according to claim 25 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.
45. (New) A probe for use in a diagnostic test kit according to claim 31 comprising a nucleotide sequence which is a fusion of two ALU elements of the BRCA1 gene.

- C2
CD4
46. (New) A probe for use in a diagnostic test kit according to claim 15, wherein the deletion comprises at least a major part of any one or all of exons 13, 14, 15, and 16, or at least a major part of exon 22 comprises, and wherein the probe is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
47. (New) A probe for use in a diagnostic test kit according to claim 16, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
48. (New) A probe for use in a diagnostic test kit according to claim 17, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
49. (New) A probe for use in a diagnostic test kit according to claim 18, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
50. (New) A probe for use in a diagnostic test kit according to claim 19, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
51. (New) A probe for use in a diagnostic test kit according to claim 20, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
52. (New) A probe for use in a diagnostic test kit according to claim 25, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
53. (New) A probe for use in a diagnostic test kit according to claim 31, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.
54. (New) A probe for use in a diagnostic test kit according to claim 38, which is a fusion product of two sequences adjacent to the site of a deletion of a stretch of nucleotides.

- CA
cont
55. (New) A method of determining the presence in a sample of a nucleic acid derived from a BRCA1 gene having a deletion of a stretch of nucleotides, comprising contacting said sample with at least one probe which alone or together with a second means for detecting said deletion of a stretch of nucleotides from a BRCA1 gene, distinguishes between BRCA1 genes having said deletion and BRCA1 genes not having said deletion, allowing hybridization between said probe and said nucleic acids to form a hybridization product and identifying the hybridization product, wherein said deletion comprises at least a major part of any one or all of exons 13, 14, 15, and 16, or at least a major part of exon 22.
-